

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006886**Date Inspected:** 17-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** You Qi Guo, Tu Jun**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

BAY 11

This QA Inspector, George Goulet, proceeded to the Bay 11 in response to a verbal ZPMC notification of witness inspection from ZPMC QA Zhang Jiadi for MT inspection as follows:

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as ESD1-TL7H/L at the 77M diaphragm. The weld designations reviewed are as follows: 6, 9, 16, 19 at the diaphragm bottom, 103, 104, 109, 110 at the diaphragm top.

This QA Inspector, George Goulet, performed random VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as ESD1-TL7C/L at the 53M diaphragm. The weld designations reviewed are as follows: 4, 5, 14, 17 at the diaphragm bottom, 115, 117, 124, 125 at the diaphragm top. This QA Inspector, George Goulet, observed excavations ground into the base metal at the ends of the welds closest to the skin plate as follows: 5mm at weld 115, 4 mm at weld 124. This QA Inspector, George Goulet, rejected all the welds at diaphragm 53M for the above noted reason.

This QA Inspector, George Goulet, performed random VT of the area previously tested and accepted by ZPMC

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Quality Control personnel. The member is identified as ESD1-TL7E/L at the 65M diaphragm. The weld designations reviewed are as follows: 117, 121, 128, 131 at the diaphragm bottom, 6, 7, 14, 15 at the diaphragm top. This QA Inspector, George Goulet, observed excavations ground into the base metal at the ends of the welds closest to the skin plate as follows: 3mm to 4mm depth at welds 6, 14, 121, 128, 131. This QA Inspector, George Goulet, rejected all the welds at diaphragm 65M for the above noted reason.

Bay 11

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 11:

FCAW welding, using the northwest gantry, of weld joints WSD1-FDSA3-2B/C-43, 44 located on PCMK west tower, lift 3, skin D. Welders were identified respectively as 070140, 069043. ZPMC QC was identified as CWI You Qi Guo (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-2332-Tc-P5-F. Also at this location and appearing to be monitoring the welding was ABF Representative Jhang Ji Cai.

SAW welding of weld joint WSD1-TL6B/L-2A located on PCMK west tower, lift 2, skins D/E. Welder was identified as 056975. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Mao Bin Bin, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-2221-C-U2b-S.

Bay 10

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 10:

FCAW welding, using the southeast gantry, of weld joints NSD1-FDSA3-1B/C-22, 23 located on PCMK north tower, lift 3, skin D. Welders were identified respectively as 201825, 040330. ZPMC QC was identified as CWI Tu Jun (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2332-Tc-P5-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted above, and this QA Inspector, George Goulet, asked each QC if all the welding variables observed by him appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each QC showed this QA Inspector, George Goulet, that he was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all he observed did appear to comply.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet, George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer
